

cular deposits and tubes. Secondary formation of fistula. Death 4 months later.

16. Same. Death from phthisis 3 months later.

In only 2 of these 6 cases of tubercular peritonitis was the diagnosis correctly made before the operation. He concludes that for operative purposes we should separate that form of peritoneal tuberculosis where there is fluid effusion and miliary nodules, from the drier adhesive peritonitis, characterized by firm tumor like lumps, plats and strands. It is the first form that has yielded such results from laparotomy, whilst, as three of his cases show, the latter form is not surgically encouraging. One of his cases indicates that the form with effusion may by resorption and thickening, pass into the dry form.

The surgery of intestinal and lymph-gland tuberculosis is very difficult, and as yet has been practiced but to a limited extent; still from his cases he urges further attempts in this direction.—*Bruns' Beitrage f. klin. Chirg*, 1890, bd. vi, heft 1.

WM. BROWNING (Brooklyn).

II. On the Treatment of Peritonitis by Abdominal Section. By DR. MIKHAIL R. OSMOLOVSKY (St. Petersburg, Russia). The author has collected 231 cases of peritonitis treated by abdominal section. Of the number, 79 were taken from German literature, 40 from British, 29 French, 22 American (U. S.), 14 Polish, 12 Russian, 8 Italian, etc. Of the total, 75 died, 154 (67.2%) recovered, while in two cases the issue remained unknown. The writer divides his cases into 8 groups.

I. *Traumatic peritonitis* (developing after surgical operations or accidental traumata).—Nineteen cases are tabulated, of which 6 died, and 13 (68.5%) recovered. The time of operation varied from 2 hours to 4½ months after injury. (The group consists of cases published by Bardeleben, Barwell, Bouilly, W. Bull (2), Chavasse, Escher, Talaguiet, Keetley, Kelly, Koeberlé, Koenig, Lannelongue, G. Owen, G. V. Pavloff, Poncet, Robertson, Steer and Vacher. Once Dr. Osmolovsky has thought proper to include into the series W. Bull's and Talagnier's cases of gunshot wound, treated by laparotomy in 2 hours

after the accident (that is, before the development of any appreciable signs of peritonitis), he ought to have collected generally all published cases of the operation for traumatism. We recommend him to study Prof. T. S. K. Morton's important paper on "Abdominal Section for Traumatism" (*vide the Jour. of the Am. Med. Ass'n*, Jan. 4, 1890; and *ANNALS OF SURGERY*, April, 1890, p. 271), based on as many as 234 cases.—*Reporter*.

II. *Peritonitis due to ulcerative perforation of abdominal viscera* (appendix, intestines, stomach, bladder).—Forty three cases are recorded, of them 33 ending in death, 10 (23.2%) in recovery. Of the 10, in 8 a "complete cure," and in 2 an "improvement" was obtained.

III. *Peritonitis due to incarcerated hernia and intestinal obstruction*.—Twenty-seven cases are given, with 13 deaths and 14 (51.8%) "complete" recoveries.

IV. *Peritonitis due to bursting of intra-abdominal abscesses or tumors* (ovarian, etc.).—Thirteen cases, with 3 deaths and 10 (77%) recoveries; of the latter 9 being "complete," 1 "amelioration."

V. *Puerperal peritonitis*.—Fourteen cases are recorded, with 7 deaths and 7 (50%) "complete" recoveries.

VI. *Idiopathic peritonitis and that of an obscure causation*.—Twenty-four cases were found, with 5 deaths and 19 (79.1%) recoveries (17 "cured," 2 "improvements").

VII. *Localized peritonitis*.—The group includes 14 cases with 1 death and 13 (92.8%) "cured."

VIII. *Tubercular peritonitis*.—Of 77 cases of this description, 7 ended in death, 68 (90.6%) in recovery (46 "cures," 22 "improvements"); in 2 cases the ultimate issue was not stated.

The author's main general conclusions may be summed up somewhat as follows:

1. Speaking generally, abdominal section constitutes the only reliable means for curing peritonitis of any description
2. Under a strict application of all antiseptic precautions, the operation is altogether safe.
3. The frequent relatively high percentage of deaths in cases of peritonitis treated by laparotomy must be attributed mainly to the fact that the operation is usually resorted to only too late.

4. It may be firmly hoped that a routinary early performance of laparotomy will raise the percentage of recoveries very considerably.

5. Of all varieties of the disease, perforative peritonitis (the author's 2nd in category) has up to the present given the lowest percentage of recoveries. Of all the forms, exactly this one requires the quickest surgical interference (immediately after the appearance of pain and other suspicious symptoms). Meanwhile, of all the cases recorded, only in Hirschberg's, the operation was made about 24 hours after the onset of the symptoms; in all others, laparotomy was resorted to as late as 3, 4 and even 10 days after the perforation had occurred. Another cause of a high mortality is that the perforation frequently escapes detection, and thus remains gaping. Collapse does not contra-indicate laparotomy. Escher, Wylie and Hall succeeded in saving their patients by having operated in spite of the presence of the symptom.

6. In tubercular peritonitis, abdominal section undoubtedly manifests a beneficial influence on the course of the disease. The explanation of the fact, however, remains yet to be found.

7. All cases of penetrating wounds of the abdomen should be treated by a possibly early laparotomy. The same may be said in regard to any traumatic peritonitis including that developing consecutively to surgical operation. (The author points to two cases reported by Koberle and Pavloff. In the former, peritonitis set in after ovariectomy and was quickly cured by abdominal section performed on the third day of the disease. In Pavloff's case, the peritoneal inflammation developed after tying the internal iliac artery, the patient's life being saved by laparotomy on the fourth day of the symptoms).

8. Collapse should be regarded as an absolute contra-indication only in cases of tubercular peritonitis. In all other varieties of the disease, it does not contra-indicate the operation, though its presence considerably lessens chances of recovery.

9. In cases of a general peritonitis, the abdominal incision must be free, in order to secure thorough examination and cleansing of the peritoneal cavity. In cases of a localized peritonitis, the incision should be short.—*St. Petersburg Inaugural Dissertation*, 1890. No. 61, p. 128.